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EXAMINER

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2163

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/619,349	<b>Applicant(s)</b> HARJANTO, ANDY	
	<b>Examiner</b> Patrick A. Darno	<b>Art Unit</b> 2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>01172006</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1-27 are pending in this office action.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 9, 13, 16, 19, 23, and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by the book “Building XML Web Services for the Microsoft®.NET Platform” published by Microsoft Press and written by Scott Short (hereinafter “Short”).

#### **Claim 1:**

Short discloses a computer-readable medium having computer-executable instructions for a client on computer network to performing steps for accessing a database on the network via a server, comprising:

receiving a description document from the server (Short: Chapter 1 – “Why Web Services?”, Section 2: “Web Services Design Decisions”, Subsection: “Choosing Description Mechanisms, particularly lines 1-3 and 13-14 of this subsection; This reference describes a WSDL document (description document) which is transferred between client, Web Server, and server in order to facilitate communication between the three components. Also note Chapter 1 – “Why Web Services?”, Section 1: “Web Services Building Blocks”.), the description document having class definitions for generic object class and a plurality of object type classes derived from the generic class

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(Short: Chapter 7 – “XML Serialization”, Section 4: “Creating Derived Datatypes”, lines 1-5 and 6-25; Note that the program code listed from lines 6-25 are identical to the program code listed under paragraph [0026] of the applicant’s specification. The generic class of the reference is Tire and the object type classes derived from the generic class are AutoTire and MountainBikeTire.), and a plurality of database operation methods defined for the generic class (Chapter 7 – “XML Serialization”, Section 6: “Defining the AcceptPO Web Method”, lines 1-16; Here the process of adding a method to a generic type is disclosed. It should be further noted that adding a method (or member function) to an object (or class) is very well known in the art.), each object type class corresponding to a type of objects in the database, the description document including at least one flag statement identifying an object type (Short: Chapter 7 – “XML Serialization”, Section 4: “Creating Derived Datatypes”, lines 6-7 and lines 26-28; The flag statement is the XmlInclude statement on lines 6-7. Each include statement distinguishes an object type class corresponding to a type of object in the database. In this case the object type is a particular type of Tire.);

generating a database access request for performing a database operation on a selected object type (Short: Chapter 1 – “Why Web Services?”, lines 67-68; The code presented in Chapter 7, WSDL documents, and Web Services are used for the purpose of generating database access requests in order to perform remote database operations.), including:

if the selected object type is the object type identified by the flag statement, creating an object of the selected object type using the class definition

for the selected object type in the received description document (Short: Chapter 7 – “XML Serialization”, Section 4: “Creating Derived Datatypes”, lines 6-25 and 26-28; The program code is the exact program code presented in the applicant’s specification and functions in the same exact manner. An object type (AutoTire or MountainBikeTire) is identified by the XmlInclude flag and a new object is created using the input parameters. An AutoTire would have the AspectRatio parameter. The program code in lines 6-25 are included in the WSDL description document as described briefly in Chapter 1 and in depth in Chapter 5 of Short’s book.);

serializing the created object of the selected object type and including the serialized object in the request message (Short: Chapter 7 – “XML Serialization”, Section 4: “Creating Derived Datatypes”, lines 5; Also see Chapter 1 – “Why Web Services?”, Section 2: “Web Services Design Decisions”, Subsection: “Choosing Description Mechanisms, particularly lines 1-3 and 13-14.).

**Claim 2:**

Short discloses all the elements of claim 1, as noted above, and Short further discloses wherein the description document is in the Web Services Description Language (Short: Chapter 1 – “Why Web Services?”, Section 2: “Web Services Design Decisions”, Subsection: “Choosing Description Mechanisms, particularly lines 1-3 and 13-14 of this subsection; This reference describes a WSDL document (description document) which is transferred between client, Web Server, and server in order to

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facilitate communication between the three components. Also note Chapter 1 – “Why Web Services?”, Section 1: “Web Services Building Blocks”).

**Claim 3:**

Short discloses all the elements of claim 2, as noted above, and Short further discloses wherein the step of receiving includes converting the description document into a compiled software format (Short: Chapter 6 – “ASP.NET”, Section 1: “Creating an ASP.NET Web Service”, lines 31-33).

**Claim 4:**

Short discloses all the elements of claim 3, as noted above, and Short further discloses wherein the compiled software format is for an intermediate language for a computer runtime environment (Short: Chapter 11 – “Debugging Web Services”, Section 2: “Information the Debugger Needs”, lines 16-18).

**Claim 9:**

Short discloses a computer-readable medium having computer-executable instructions for a server of a runtime environment platform to perform steps for providing a service of accessing a database, comprising:

sending, in response to a query from a client, a description document to the client (Short: Chapter 1 – “Why Web Services?”, Section 2: “Web Services Design Decisions”, Subsection: “Choosing Description Mechanisms, particularly lines 1-3 and 13-14 of this subsection; This reference describes a WSDL document (description document) which is transferred between client, Web Server, and server in order to facilitate communication between the three components. Also note Chapter 1 – “Why

Web Services?”, Section 1: “Web Services Building Blocks”)., the description document containing class definitions for a generic object class and a plurality of object type classes derived from the generic class (Short: Chapter 7 – “XML Serialization”, Section 4: “Creating Derived Datatypes”, lines 1-5 and 6-25; Note that the program code listed from lines 6-25 are identical to the program code listed under paragraph [0026] of the applicant’s specification. The generic class of the reference is Tire and the object type classes derived from the generic class are AutoTire and MountainBikeTire.), and a plurality of database operation methods defined for the generic class (Chapter 7 – “XML Serialization”, Section 6: “Defining the AcceptPO Web Method”, lines 1-16; Here the process of adding a method to a generic type is disclosed. It should be further noted that adding a method (or member function) to an object (or class) is very well known in the art.), each object type class corresponding to a type of objects in the database, the description document including at least one flag statement identifying an object type (Short: Chapter 7 – “XML Serialization”, Section 4: “Creating Derived Datatypes”, lines 6-7 and lines 26-28; The flag statement is the XmlInclude statement on lines 6-7. Each include statement distinguishes an object type class corresponding to a type of object in the database. In this case the object type is a particular type of Tire.);

receiving a request from the client for performing a requested database operation method, the request including a serialized object for the requested database operation method (Short Chapter 7 – “XML Serialization”, Section 6: “Defining the AcceptPO Web Method”, lines 19-21; Also note that the purpose of the Web Service is to allow the client to request database operations. Web Services accept request from clients in a

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certain format and then translate that format into the format needed to access a server (database). Web Services also translate the response from the server into a form suitable for the client. This is well known in the art and admitted prior art as stated in paragraph [0002] of the applicant's disclosure under "Background of the Invention".);

deserializing the serialized object; identifying an object type and parameters of the deserialized object; accessing the database to carry out the requested database operation method based on the object type and parameters of the deserialized object (Short: Chapter 7 – "XML Serialization", lines 1-4 and Chapter 7 – "XML Serialization", section 4: "Creating Derived Datatypes", lines 6-7 and Short: Chapter 1 – "Why Web Services?", lines 67-68; The first reference cited here shows that the process of XML Serialization handles both serialization and deserialization of objects. The second reference shows the XmlInclude command, which is used to identify object types. And the third reference shows that Web Services are used to carry out activities at the request of a client.)

**Claim 13:**

Short discloses all the elements of claim 9, as noted above, and Short further discloses wherein the description document is in the Web Services Description Language (WSDL) (Short: Chapter 1 – "Why Web Services?", Section 2: "Web Services Design Decisions", Subsection: "Choosing Description Mechanisms, particularly lines 1-3 and 13-14 of this subsection; This reference describes a WSDL document (description document) which is transferred between client, Web Server, and server in order to



facilitate communication between the three components. Also note Chapter 1 – “Why Web Services?”, Section 1: “Web Services Building Blocks”).

**Claim 16:**

Short discloses all the elements of claim 9, as noted above, and Short further discloses wherein the step of accessing the database to carry out the requested database operation method includes communicating with a database server for the database (Short: Chapter 1 – “Why Web Services?”, Section 1: “Web Services Building Blocks”, lines 25-28; Note especially “message must be transferred between the client and the server”. This requires communication between the client and the database server.).

**Claim 19:**

Short discloses a Web service for accessing a database, comprising:  
means for providing a description document containing class definitions for a generic object class and a plurality of object type classes derived from the generic class (Short: Chapter 7 – “XML Serialization”, Section 4: “Creating Derived Datatypes”, lines 1-5 and 6-25 and Chapter 1 – “Why Web Services?”, lines 1-18; Note that the program code listed from lines 6-25 are identical to the program code listed under paragraph [0026] of the applicant’s specification. The generic class of the reference is Tire and the object type classes derived from the generic class are AutoTire and MountainBikeTire. The second reference given here from Chapter 1 is an introduction to Web Services that makes clear a computer system for carrying out the program code presented throughout the text. Specifically line 18 cites “Clients” communicating with the “server” over the

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“internet”. “Clients” and “servers” are known in the art to include a CPU, memory, and operating systems providing a **means for** carrying out the suggestions set forth in the text written by Short. Examiner notes that the “client”, “server”, and “internet” provide the **means for** all of the further cited portions in the rejection of claims 19-27.), and a plurality of database operation methods defined for the generic class (Chapter 7 – “XML Serialization”, Section 6: “Defining the AcceptPO Web Method”, lines 1-16; Here the process of adding a method to a generic type is disclosed. It should be further noted that adding a method (or member function) to an object (or class) is very well known in the art.), each object type class corresponding to a type of objects in the database, the description of document including at least one flag statement identifying an object type (Short: Chapter 7 – “XML Serialization”, Section 4: “Creating Derived Datatypes”, lines 6-7 and lines 26-28; The flag statement is the XmlInclude statement on lines 6-7. Each include statement distinguishes an object type class corresponding to a type of object in the database. In this case the object type is a particular type of Tire.);

means for sending, in response to a query from a client, the description document to the client (Chapter1 – “Why Web Services?”, line 18; The means for sending the description document are the “client” (known in the art to be a computer comprising CPU, memory, operating system, etc.) and the “internet”).;

means for receiving a request from the client for performing a requested database operation method, the request including a serialized object for the requested database operation method (Short Chapter 7 – “XML Serialization”, Section 6: “Defining the AcceptPO Web Method”, lines 19-21; Also note that the purpose of the Web Service

is to allow the client to request database operations. Web Services accept request from clients in a certain format and then translate that format into the format needed to access a server (database). Web Services also translate the response from the server into a form suitable for the client. This is well known in the art and admitted prior art as stated in paragraph [0002] of the applicant's disclosure under "Background of the Invention".);

means for deserializing the serialized object; means for identifying an object type and parameters of the deserialized object; means for accessing the database to carry out the requested database operation method based on the object-type and parameters of the deserialized object (Short: Chapter 7 – "XML Serialization", lines 1-4 and Chapter 7 – "XML Serialization", section 4: "Creating Derived Datatypes", lines 6-7 and Short: Chapter 1 – "Why Web Services?", lines 67-68; The first reference cited here shows that the process of XML Serialization handles both serialization and deserialization of objects. The second reference shows the XmlInclude command, which is used to identify object types. And the third reference shows that Web Services are used to carry out activities at the request of a client.).

**Claim 23:**

Short discloses all the elements of claim 19, as noted above, and Short further discloses wherein the description document is in the Web Services Description Language (WSDL) (Short: Chapter 1 – "Why Web Services?", Section 2: "Web Services Design Decisions", Subsection: "Choosing Description Mechanisms, particularly lines 1-3 and 13-14 of this subsection; This reference describes a WSDL document (description

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document) which is transferred between client, Web Server, and server in order to facilitate communication between the three components. Also note Chapter 1 – “Why Web Services?”, Section 1: “Web Services Building Blocks”).

**Claim 25:**

Short discloses all the elements of claim 19, as noted above, and Short further discloses wherein the means for deserializing the object in the request is a runtime environment (Short: Chapter 7 – “XML Serialization”, Section 7: “Server-Side Validation”, line 11).

**Claim 26:**

Short discloses all the elements of claim 19, as noted above, and Short further discloses wherein the means for accessing the database communicates with a database server for the database to carry out the requested database operation method (Short: Chapter 1 – “Why Web Services?”, Section 1: “Web Services Building Blocks”, lines 25-28; Note especially “message must be transferred between the client and the server”. This requires communication between the client and the database server.).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Short in further view of U.S. Patent Application Publication Number 2004/0162871 issued to Kuldipsingh A. Pabla et al. (hereinafter "Pabla").

**Claim 5:**

Short discloses all the elements of claim 1, as noted above, but does not explicitly disclose wherein the database operation methods includes a search method. However, Pabla discloses wherein the database operation methods includes a search method (Pabla: see program code underneath paragraph [0105]; The code listed is program code for a class. One of the methods included with the class is a search method named "public int search()").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a search method as a database operation method. The skilled artisan would have been motivated to improve the teachings of Short per the above such the search method could return any contents of the database matching an input parameter.

**Claim 7:**

Short discloses all the elements of claim 1, as noted above, but does not explicitly disclose wherein the database operation methods includes at least one method with an array as an operand. However, Pabla discloses wherein the database operation methods includes at least one method with an array as an operand (Pabla: see program code above paragraph [0104]; The code listed is program code for a class.

One of the methods included with the class is a method named "Message" and it accepts an array as an operand.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Short with the teachings of Pabla noted above. The skilled artisan would have been motivated to improve the teachings of Short with the teachings of Pabla noted above for the purpose of performing batch processing (Accepting an array of elements as an operand in a method or function is very well known in the art.).

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Short in view of Pabla and further in view of U.S. Patent Application Publication Number 2003/0233360 issued to Chai-Hup Tan (hereinafter "Tan").

**Claim 6:**

The combination of Short and Pabla discloses all the elements of claim 5, as noted above, but does not explicitly disclose wherein the search method returns an array as search results. However, Tan discloses wherein the search method returns an array as search results (Tan: paragraph [0046], lines 1-8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of Tan noted above. The skilled artisan would have been motivated to improve the previously mentioned combination such that when multiple results are found for a search, all results are returned, not just the first match.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Short in view of Pabla and further in view of U.S. Patent Number 5,392,448 issued to Robert F. Frankel et al. (hereinafter "Frankel").

**Claim 8:**

The combination of Short and Pabla discloses all the elements of claim 7, as noted above, but does not explicitly disclose wherein the at least one method is a create method. However, Frankel discloses wherein the at least one method is a create method (Frankel: column 10, lines 56-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of Frankel noted above. The skilled artisan would have been motivated to improve the previously mentioned combination per the above such that the class contains a method capable of creating a new object.

6. Claims 10-11 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Short in further view Tan.

**Claim 10:**

Short discloses all the elements of claim 9, as noted above, but Short does not explicitly disclose having further computer-executable instructions for performing the step of returning a result of carrying out the requested database operation method. However, Tan discloses having further computer-executable instructions for performing the step of returning a result of carrying out the requested database operation method

(Tan: paragraph [0046], lines 1-8; The array of search results are returned. The database operation was the search.).

It would have been obvious for one of ordinary skill in the art to modify the teachings of Short with the teachings of Tan noted above. The skilled artisan would have been motivated to improve the teachings of Short per the above such that after execution of a method (or function call) the result of the method (or function call) is returned and can be used in further processing.

**Claim 11:**

The combination of Short and Tan discloses all the elements of claim 10, as noted above, and Tan further discloses wherein the requested database operation method is a search method, and wherein the result of the requested database operation method includes an array (Tan: paragraph [0046], lines 1-8; An array is returned as a result of a search operation.).

**Claim 20:**

Short discloses all the elements of claim 19, as noted above, but does not explicitly disclose means returning a result of carrying out the requested database operation method to the client. However, Tan discloses means returning a result of carrying out the requested database operation to the client (Tan: paragraph [0046], lines 1-8; The array of search results are returned. The database operation was the search.).

It would have been obvious for one of ordinary skill in the art to modify the teachings of Short with the teachings of Tan noted above. The skilled artisan would have been motivated to improve the teachings of Short per the above such that after



execution of a method (or function call) the result of the method (or function call) is returned and can be used in further processing.

**Claim 21:**

Short discloses all the elements of claim 19, as noted above, and but Short does not explicitly disclose wherein the directory operation methods include a search method returning an array as a search result. However, Tan discloses wherein the directory operation methods include a search method returning an array as a search result (Tan: paragraph [0046], lines 1-8).

It would have been obvious to one ordinary skill in the art at the time the invention was made to modify the previously mentioned combination with the teachings of Tan noted above. The skilled artisan would have been motivated to improve the invention of Short per the above such that when multiple results are found for a search, all results are returned, not just the first match.

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Short in further view of U.S. Patent Application Publication Number 2004/0267808 issued to Hiroyuki Matsushima (hereinafter "Matsushima").

**Claim 12:**

Short discloses all the elements of claim 9, as noted above, but does not explicitly disclose wherein the requested database operation method has an array as operand, and the request includes a plurality of serialized objects of different object types corresponding to elements of the array. However, Matsushima discloses wherein the requested database operation method has an array as operand, and the request

includes a plurality of serialized objects of different types corresponding to elements of the array (Matsushima: paragraph [0210], lines 1-8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Short with the teachings of Matsushima noted above. The skilled artisan would have been motivated to improve the Short's invention per the above in order to help develop a scheme to absorb the difference between two data formats being submitted through the Web Server (Matsushima: paragraph [0006], lines 1-6).

8. Claims 14, 15, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Short in further view of U.S. Patent Application Publication Number 2004/0088713 issued to Myllymaki et al. (hereinafter "Myllymaki").

**Claim 14:**

Short discloses all the elements of claim 13, as noted above, but Short does not explicitly disclose wherein the step of sending the description document includes converting a compiled code module into the description document. However, Myllymaki discloses wherein the step of sending the description document includes converting a compiled code module into the description document (Myllymaki: paragraphs [0070] and [0071]; Note the SD description code is translated to executable code (machine or compiled code) and then a WSDL description document is created from the SD description code.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Short with the teachings of Myllymaki

noted above for the purpose generating a WSDL description document from compiled (executable) code (Myllymaki: paragraph [0071], lines 4-8). The skilled artisan would have been motivated to improve the teachings of Short per the above such that it would assist a client application to programmatically access a website (Myllymaki: paragraph [0010], lines 1-2).

**Claim 15:**

The combination of Short and Myllymaki discloses all the elements of claim 14, as noted above, and Short further discloses wherein the compiled code module is in an intermediate language for a runtime environment platform (Short: Chapter 11 – “Debugging Web Services”, Section 2: “Information the Debugger Needs”, lines 16-18).

**Claim 24:**

Short discloses all the elements of claim 23, as noted above, but does not explicitly disclose wherein the means of providing the description document includes a WSDL conversion module for converting a compiled code module into the description document. However, Myllymaki discloses wherein the means of providing the description document includes a WSDL conversion module for converting a compiled code module into the description document (Myllymaki: paragraphs [0070] and [0071]; The conversion of the executable (compiled) code to the WSDL document requires some form of a WSDL conversion module.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Short with the teachings of Myllymaki noted above for the purpose generating a WSDL description document from compiled

(executable) code (Myllymaki: paragraph [0071], lines 4-8). The skilled artisan would have been motivated to improve the teachings of Short per the above such that it would assist a client application to programmatically access a website (Myllymaki: paragraph [0010], lines 1-2).

9. Claim 17-18 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Short in further view of U.S. Patent Application Publication Number 2005/0193269 issued to John Jeffrey Haswell et al. (hereinafter "Haswell").

**Claim 17:**

Short discloses all the elements of claim 16, as noted above, but Short does not explicitly disclose wherein the communicating with the database server is according to a directory access protocol. However, Haswell discloses wherein the communicating with the database server is according to a directory access protocol (Haswell: paragraph [1529]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Short with the teachings of Haswell noted above. The skilled artisan would have been motivated to improve the teachings of Short per the above because LDAP (the directory access protocol used by Haswell) is the industry standard Internet Protocol for accessing directory services (Haswell: paragraph [1529], lines 3-5).

**Claim 18:**

The combination of Short and Haswell discloses all the elements of claim 17, as noted above, and Haswell further discloses wherein the database access protocol is the Lightweight Directory Access Protocol (LDAP) (Haswell: paragraph [1529]).

**Claim 27:**

Short discloses all the elements of claim 26, as noted above, and but Short does not explicitly disclose wherein the means for accessing the database communicates with the database server using the Lightweight Directory Access Protocol (LDAP). However, Haswell discloses wherein the means for accessing the database communicates with the database server using the Lightweight Directory Access Protocol (LDAP) (Haswell: paragraph [1529]).

10. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Short in further view of Frankel.

**Claim 22:**

Short discloses all the elements of claim 19, as noted above, but does not explicitly disclose wherein the database operation methods include a create method having an array as operand. However, Frankel discloses wherein the database operation methods include a create method having an array as operand (Frankel: column 22, lines 56-58).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Short with the teachings of Frankel noted above. The skilled artisan would have been motivated to improve the invention of Short

per the above such that a method is capable of performing batch processing on a grouping of input data.


***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick A. Darno whose telephone number is (571) 272-0788. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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